Art2<code>

is a catalog that will exhibit the work of artists who use computer programming and code to create work that manifests as screen imagery, sculptural objects, installation environments, or time-based performance.

The collected artworks highlight the various ways algorithms and computer coded instructions are used to create artwork that expands the interactive relationships between art, artists and audience.

Art2<code> is a catalog of art projects that addresses the use of computer programming as an essential tool to create work that manifests screen imagery, sculptural objects, installation environments, or time-based performance. In recent years programming has become a more common skill used by artists and makers. Projects like the Processing language, Scratch and even games like Minecraft provide accessible gateways for artists and students alike. However, like other media forms, artists are not only using the tools, but they are critically considering how programming, big data and algorithms operate within the culture at large.

Art2<code> is the fourth in a series of experimental catalogs that explore artists' responses to new technologies. The intent of this is to explore how these technologies are being adopted, adapted to art practices while simultaneously engaging critical dialogs. Previous projects include *Scan2Go*, *Art2View* and *Art2Make* which focuses on QR codes, augmented reality and 3D printing respectively. Each publication includes a feature for each project with links to a rich media website and critical essays that extend the viewing experience.

Art2<code> would not have been possible without the dedication of many collaborators. My thanks and appreciation go to Meredith Hoy and Tiffany Funk for contributing critical perspectives that shape how these works are understood and to the curatorial team; Gail Rubini, Conrad Gleber, Ivan Martinez and Chris Manzione.

The Services to Artists Committee of the College Art Association sponsored this project as part of the 2016 CAA Annual Conference in Washington, D.C. I would like to express my gratitude to Conrad Gleber, Chris Manzione and Gail Rubini from the media arts collective *v1b3* for organizing the project, designing the catalog and companion website. Finally, I would like to thank the administrative staff of CAA for sharing this four-year journey that has given critical representation to forms that often seem fringe.

Mat Rappaport
Associate Professor Columbia College, Chicago
President Elect, New Media Caucus

Magic, the Future, and Code:
Casting Coding within the Prosthetic Relationship
Tiffany Funk

In 1968, Jasia Reichardt's mammoth experimental *Cybernetic Serendipity* constituted one of the most influential computer art exhibitions, including many significant early examples of computer animation, three-dimensional modeling, stereoscopic display, and telepresence. One of these works, a short film by A. Michael Noll, demonstrated in four successive stereo pairs a four-dimensional hypercube, projected mathematically onto three dimensions and twice projected stereoscopically. Though 3D films existed prior to Noll's film, his construction of a 3D model did not simply describe a 2D figure representing 3D space; instead, the computer made it possible to create a 3D figure with mapped coordinates in three dimensions, then produce two-dimensional films exploring that created 3D space. In the catalogue essay "Computer-animated movies," Kenneth C. Knowlton explained how Noll's film demonstrated the computer performing as a *prediction* machine: the simulation "... determines the successive states of this system by following differential equations or other laws supplied; it then uses its drawing capabilities to render a series of views of the resulting events." [1] The programmer states the conditions of an experiment, and the software generates a matrix of future outcomes. Computer animation performs both aesthetic and practical functions: the software predicts an array of possibilities—or *futures*—in a suitable graphical environment encouraging exploration.

Though computer-generated art remained largely ignored by the art establishment in the 1960s and 70s, criticized for its seemingly anachronistic formalism, it emerged roughly at the same time as conceptual art practices increasingly dominated art discourse. Despite existing biases, computer artworks from the era reflected the embedded influence of conceptual practices; many hybrid artists/programmers/engineers considered the concepts behind the data crucial, and the computational transformation of this data demanded meaningful conceptual frameworks. Though the contributors to the **Art2<code>** exhibition use code in a variety of ways—screen-based imagery, sculptural objects, installation environments, and time-based performance—they each share in the legacy of Reichardt's *Cybernetic Serendipity* in their conceptual rigor: like Noll's films, they exemplify what I call the "prosthetic aesthetic," an experience revealing the fundamentally reflexive relationship between human and technology. Thusly, they accomplish what other traditional mediums can not: they construct an interactive, radical space of *potentiality* in their ability to predict, and thus influence future outcomes. Though contemporary divination performs pragmatic, process-based actions that arrive at empirical outcomes, they still retain a sense of magic in their reflexivity,

thus enacting a historical precedent for coding as a form of divination, participating in rituals embedded in the history of humankind.

Friedrich Kittler reconciled pre-modern modes of production and contemporary media usage in his text *Discourse Networks 1800/1900*, making the case that the kinds of technology we use fundamentally influence how we behave and what we produce. [2] Though he focused on the literary shift from Romanticism to Modernism, his methodology in analyzing discourse networks translates cleanly to an understanding of how divination methods dictate outcomes: by focusing upon the materials embedded in these divination networks, the prognostication techniques depended upon the nature of models used to predict, and thus influenced personal and societal actions of humans for centuries.

The fundamental similarities between predominantly binary systems of any era or region indicates a historical, socio-cultural connection that correlates many early prognostication systems with algorithmic processes. Many of the known ancient and classical prognostication methods were performed with systematic preciseness, learned through experience and patience; for example, despite its strange imagery in modern contexts, the ancient Etruscan prognostication ritual of *extispicy*—reading entrails—was performed in such a scientific manner that it should be interpreted as an early mode of autopsy. Extispicy constituted one of the first prognostication systems deriving meaning from elements outside of the human body and not simply from the whims of a designated group member. [3] In similar fashion, augury—reading the flight patterns of birds for divination purposes—depended similar systematic methods of inquiry; reads required the generation of binaries to create complex algorithmic systems, a stream of questions combined to form a procedural schema advancing in complexity as conditions are met. [4] In a more specific, enduring example, ethno-mathematician Ron Eglash examined fractal patterns underpinning architecture, art, and design across the continent of Africa. [5]

These prediction methods derived from engendered prosthetic relationships, reflexive interactions between group members and the nature of the materials used to make predictions. While systematic chains of binary values, e.g. those derived from bird flight produced singular, individual readings, now a computer can provide vast quantities of data, placing emphasis on quantification while simultaneously de-emphasizing its computational method. This provides a more ambiguous transition between these so-called pre-modern, biological models of prognostication and cybernetic systems increasingly prevalent after WWII; while the nature of prognostication, specifically in its embedded-ness in human tradition and performance, did not necessarily change, its interpretations and outcomes changed in accordance with the materials designated by each civilization's cultural needs. In this way, the function of chance operations in American mid-century art and performance practice conformed to the materials at hand, eventually including the computer.

Julianne Aguilar takes full advantage of technology's deep connection with the history of magic and prognostication. *n3t50ng5.com*, described as "a magic spell written in CSS3," imagines coding as spell casting, wherein the viewer is encouraged to partake in a mystical out-of-body experience. Nick Bontrager's avatar, in his work *SIGNALS*, similarly sends codes to a target viewer; appearing in different locations with the same military signaling lamp, he flashes Morse code that beckons the viewer respond to the customized messages.

Nowhere is the magical quality of code more apparent than in the generative software artworks included in this catalogue. Though Nicholas Economos' *Apophenia* uses random variables to generate segments, the evolving animations generate as line-drawings, appearing as if scrawled by an invisible hand. Catherine Siller's *Not Not 0.1* also challenges and deconstructs human gestures by performing with her echoed-response technological double; after performing a "duet," Siller leaves the stage, allowing the virtual Siller the agency to perform solo.

Joshua Albers' work *Transmission 2* takes on both literal and metaphorical interpretations of the prosthetic relationship; there's the literal glow of his movements tracked over time, but also his personal experience figuratively watched from above. *Transmission 2* becomes a hybrid technologically-gridded but organicstructure, exemplifying the interconnectedness of human and tracking technologies. Likewise, Andrej Boleslavsky's *Google Eye* condenses time into a single visualization; he calls his work "collaborative" in that visitors of the webpage contribute to the resulting sculpture by adding pieces of matter, though "collaborative" could also refer to the integral elements of Google Analytics and its own data-gathering methods. Mark Ramos' *last_night_i_dreamt_of_a_hollow_earth* also attempts to visualize ephemeral experience into concrete renders. His series consists of a series of 3D printed sculptures generated from the brainwave pattern of dream using a BCI (Brain Computer Interface).

Works such as Mark Franz' *Zelda Deforested* perform literal prognostication, in this case predicting a future *Legend of Zelda* landscape in which all forest elements become rocky landscapes, characters must hoard resources and seek shelter underground, and all but one animal species has died off. Martin Reiche's *Drone Garden* also creates an environment of scarcity through constructing a series of interconnected hybrid "plants" (drones) that continually fight for access to resources (in this case, networked bandwidth). Benjamin Grosser's *Computers Watching Movies* seems to predict a time when only computers are able to partake in humanity's once treasured pastime; this work illustrates how computational systems "watch" films when equipped with the agency of vision algorithms and artificial intelligence routines.

It is my hope that works such as these, and the others within the pages of this catalogue, continue the tradition of engendering and interrogating the prosthetic relationships that so fundamentally inform our

understanding of how we live in the world. The magic that these works and so many others celebrate connect us to a much longer human history of ritual, experimentation, and prediction.
Coding is, in short, performing our humanness.

Tiffany Funk
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University of Illinois at Chicago
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[1] Kenneth C. Knowlton, "Computer-animated movies," in Cybernetic Serendipity: The Computer and the Arts, a Studio International special issue, ed. Jasia Reichardt (London: Studio International, 2nd edition, Set. 1968), 68

[2] Friedrich Kittler, Discourse Networks 1800/1900 (Stanford, CA: Stanford University Press, 1992).

[3] Derek Collins, "Mapping the Entrails: The Practice of Greek Hepatoscopy," American Journal of Philology 129 (2008): 319-345; more information about the early cross-cultural influence of Eastern prognostication methods across ancient Europe is explored in Walter Burkert, The Orientalizing Revolution: Near Eastern Influence on Greek Culture in the Early Archaic Age(New York: Thames and Hudson, 1992), 46–51.

[4] Again, Burkert's text relates the divination method of augury with extispicy and other Eastern-influenced methods: ibid., 49.

[5] Ron Eglash, African Fractals: Modern Computing and Indigenous Design (New Brunswick: Rutgers University Press, 1999); Eglash, Appropriating Technology: Vernacular Science and Social Power, ed. Eglash, R., Croissant, J., Di Chiro, G., and Fouché, R. (Minneapolis: University of Minnesota Press, 2004).

ARTISTS/PROJECTS

Julianne Aguilar, *n3t50ng5.com*
Joshua Albers, *Transmission 2*
Abraham Avnisan, *Collocations*
Andrej Boleslavský, *Google Eye*
Nick Bontrager, *SIGNALS*
Victoria Bradbury, *Witch Pricker*
Joelle Dietrick, *Cargomobilities*
Nicholas Economos, *Apophenia*
Rafael Fajardo, *Hopscotch*
Mark Franz, *Zelda Deforested*
Lori Hepner, *Status Symbols*
Daniel Howe, *Automatype*
Scott Kildall, *Data Crystals*
Benjamin Grosser, *Computers Watching Movies*
Meg Mitchell, *space is language is space*
Joelle Dietrick and Owen Mundy, *Packet Switching*
Mark Ramos, *last_night_i_dreamt_of_a_hollow_earth*
Martin Reiche, *Drone Garden*
Catherine Siller, *Not Not 0.1*
Robert Spahr, Sabot *(Nine Quilts for MOVE)*
Abram Stern, *The Unreliable Interrogator: smallest procedural unit*
Andrei Thomaz, *Time Machines*
Jeff Thompson, *INTERP*
Jody Zellen, *The Unemployed*

Julianne Aguilar
n3t50ng5

statement

n3t50ng5.com is a magic spell written in CSS3. This website initiates hypnotic episodes. The computer speaks in numbers but also minor keys and gradients. The human eye is easily fooled. Out of body experiences are encouraged.

biography

Julianne Aguilar will receive her MFA from the University of New Mexico in May 2016. She's into the internet, video games and otaku culture.

links

project site: http://n3t50ng5.com
http://hykul.org/

Joshua Albers
Transmission 2

statement

Transmission 2 is a data visualization that envisions my geographic history as an ongoing dispersion of data. Combining GPS tracks of my movement in Chicago recorded from 2011 to 2014, the piece uses the information from multiple years as the source of a particulate substance that scatters over the surrounding environment. Transmission 2 seeks to make the invisible electromagnetic signature emanated by my position in space over time visible as a pattern of phosphorescent traces. My objective in applying data collection and processing techniques to visual information is not to acquire and store the images that are represented by the points of data, but rather to visualize the cumulative relationships between the points. I find shapes that can express aspects of experience in order to gain a broader understanding of how experience is created in the mind. I explore aspects of human perception—and desired augmentation to it—using information technology.

biography

Received a BFA at Missouri State University in 2004 and an MFA in New Media Arts from University of Illinois at Chicago in 2013. In 2012, he participated in Google Summer of Code and the ACRE residency. He was also awarded 1st place in the 2013 UIC Image of Research competition. He is currently an Assistant Professor of Interdisciplinary Media Arts at University of Wisconsin Oshkosh.

links

project site: http://n3t50ng5.com

Please pick up the tablet and move it around in space. The tablet is responsive to rotations along its x- and y-axes, as illustrated in the diagrams below.
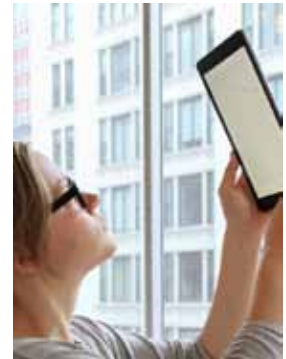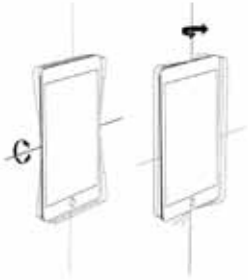
Abraham Avnisan
Collocations

statement

Collocations is a work of experimental writing that explores the disruptive implications of quantum mechanics for science, philosophy, literature and the arts. Designed for tablet computers, *Collocations* employs strategies of palimpsest, visual poetry, and algorithmically defined systems to produce a work of innumerable poetic texts. Interaction with the work transforms the user into an experimenter whose observation and physical manipulation of the device determines the materialization of any possible number of unique textual configurations in a dynamic, non-linear and kinesthetic reading experience.

biography

Abraham Avnisan is a poet and artist exploring the materiality of language through computer programming and digital media. His work has been published and exhibited in the Poetry Project Newsletter, Drunken Boat, Rain Taxi, Centotto Gallery, the Figment Arts Festival on Governor's Island in New York City, and others. He holds an M.F.A. in poetry from Brooklyn College and is currently an M.F.A. candidate in the Art and Technology Studies Program at the School of the Art Institute of Chicago.

links

https://vimeo.com/119868407

Andrej Boleslavský
Google Eye

statement

Generative datasculpture visualizing Google Analytics data about visit of iMal.org. The data represents one year cycle with events being visualised as a peaks or falls. Significant events are visible, caused by activity towards public and some are caused by external factors. Goal was to create an artwork that is generated by an algorithm raising awareness of creative abilities of information systems. The resulting model could be considered as a collaborative sculpture. Every visitor of the webpage contributed to the resulting shape of the object by adding tiny piece of matter to a precise location.

biography

Interaction designer and new media artist. Currently working as an artist and researcher for CIANT – International Centre for Art and New Technologies. He focuses on the creating of artworks using a wide range of new media technologies, elements of experimental games, generative art and physical computing. He has participated in media festivals and curated exhibitions His specialization in the field of programming and media platforms to develop interactive artworks. andrej.boleslavsky@gmail.com

links

http://id144.org/

Nick Bontrager
SIGNALS

statement

SIGNALS invites interaction with a digital avatar of the artist. By sending a text message, generated Morse code messages are flashed to an avatar of the artist on screen via a military signaling lamp. The artist then responds to the visitor's query through generated video in Morse code with a similar lamp. Visitors are invited to decode the video response, thus customizing the content and crafting a unique exchange. Taking place in different locations (iconic forests, deserts, bridges and bodies of water).

SIGNALS creates the illusion that the character in the film is communicating with visitors in real-time.

biography

Nick Bontrager is an interdisciplinary artist who explores the conceptual nature of the moving image, game-based interactions and exchanges, and the idea of replicas or facsimiles as tools of preservation. He received his MFA from The Ohio State University and his BFA at the University of Houston in Photography & Digital Media. He has developed the New Media Art program in the School of Art at Texas Christian University building bridges between the Arts & Sciences.

links

http://nickbontrager.com/

Joelle Dietrick
Cargomobilities

statement

Cargomobilities is a new site-specific work creates a multilayered mural of paint and adhesive fabric to present a visual commentary about the interconnectedness of macro economies and micro systems. Using geolocation data for cargo ships and shipping containers, the artist employs a glitch art aesthetic that allows her to analyze, recode, manipulate, and visualize data into a pulsating scene of cranes, cargo ships, and houses. Paint and Terylene fabric on three walls, 40 x 60 ft. at MOCA Jacksonville.

biography

Joelle Dietrick's paintings, drawings, and animations explore contemporary nesting instincts and their manipulation by global economic systems. She has attended residencies and received grants and fellowships from the National Endowment for the Arts, the University of California, Florida State University, and the Deutscher Akademischer Austausch Dienst (DAAD).

links

http://joelledietrick.com/site/cargomobilities_FL
http://joelledietrick.com/
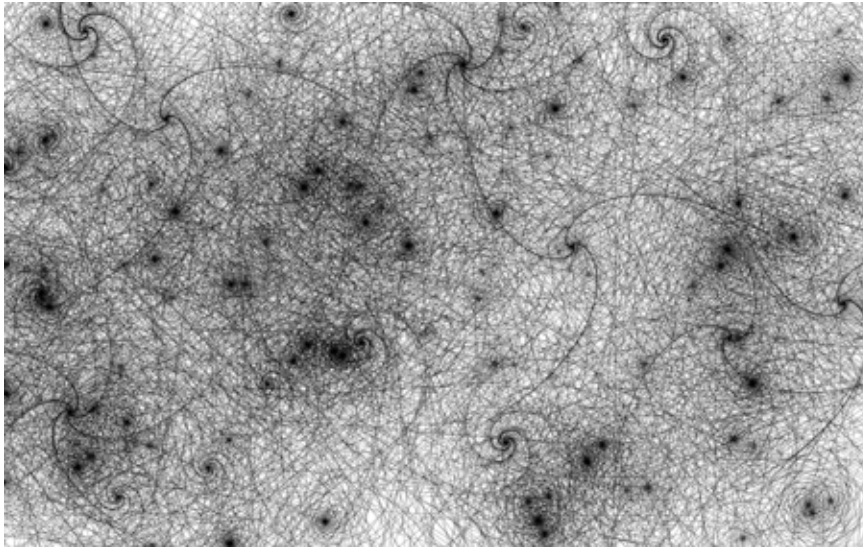
Nicholas Economies
Apophenia

statement

Apophenia is a generative software art work programmed in Processing. The work was created to run installed in a gallery. The real thing is non-looping and changes with each iteration. Apophenia is from a recent series of generative art works. It is a time-based work that evolves countless iterations of animations of simple graphic line work on a solid white ground. The line work and patterns closely reference my drawings done in ink on paper. The work has five segments that occur in random sequence and each of the segments has random variables recognizable as a member of a segment group.

biography

His art practice includes software art, responsive media art, sound, video, and animation. He is an Editor Emeritus for Rhizome.org at The New Museum of Contemporary Art in NYC. His awards include an Individual Artist Project Grant in Film, Media, and New Technology Production from the NYS Council on the Arts; a Newcomer Award at the Darklight Film Festival in Dublin, Ireland; and an Individual Excellence Award in Media Arts from the Ohio Arts Council. http://www.wallcloud.com/

links

https://vimeo.com/56781183
http://currentsnewmedia.org/work/apophenia/

Rafael Fajardo
Hopscotch

statement

Hopscotch explores how very simple algorithms might be able to generate complexly interrelated lines of great beauty. I have been making drawings with small algorithms. I've been writing code hoping to be surprised, and sometimes succeeding. *Hopscotch* is an app for the iPad. It uses a touch, swipe-to-drag and drop interface. It includes resonances with Logo, Design By Numbers, Processing, and Scratch through a "pen" entity that is plotted in two dimensions with either direction and stepping, or changes in X and Y values.
As of this writing that project now has surpassed 30,000 plays.

biography

Rafael Fajardo teaches at the University of Denver in Electronic Media Art & Design, and Digital Media Studies. He is part of a group of artists and designers who are exploring the potential of digital video games to express serious and complex subject matter. Through his collaborative, SWEAT, Fajardo has published two video games that comment on the game-like nature of (il)legal human traffic at the US/Mexico border. These games have been exhibited in Holland, Turkey, Canada, Australia and the US.

links

http://rafaelfajardo.com/portfolio/about-code-drawings/
http://rafaelfajardo.com/
https://www.gethopscotch.com/

Mark Franz
Zelda Deforested

statement

Zelda Deforested is a serious game that revises the Legend of Zelda by removing all of the forest elements and replaces them with a rocky landscape. The graphics and sound have been redesigned to create a new narrative where people live underground due to changes in the environment . Within these bunkers are characters hoarding supplies to deal with the struggles of living life underground. Only one animal species has survived in a terrain without trees and water. The hero has taken to hunting in order to gather food and barter for tools. This work intends to challenge viewers to critically consider the role of technology in modern life and its relationship to the natural world.

biography

Mark Franz is a designer, artist, and educator whose primary research projects involve the creation of interactive installations that reflect on issues of violence, dislocation, and other social constructions important in contemporary cultures. Franz's secondary research involves creating custom hardware and software for audiovisual performance and installation. He is an Assistant Professor, in the School of Art + Design and teaches courses in Graphic Design, New Media, Visual Systems, and Interaction Design.

links

http://markfranz.org/portfolio/zelda-deforested/
http://markfranz.org/
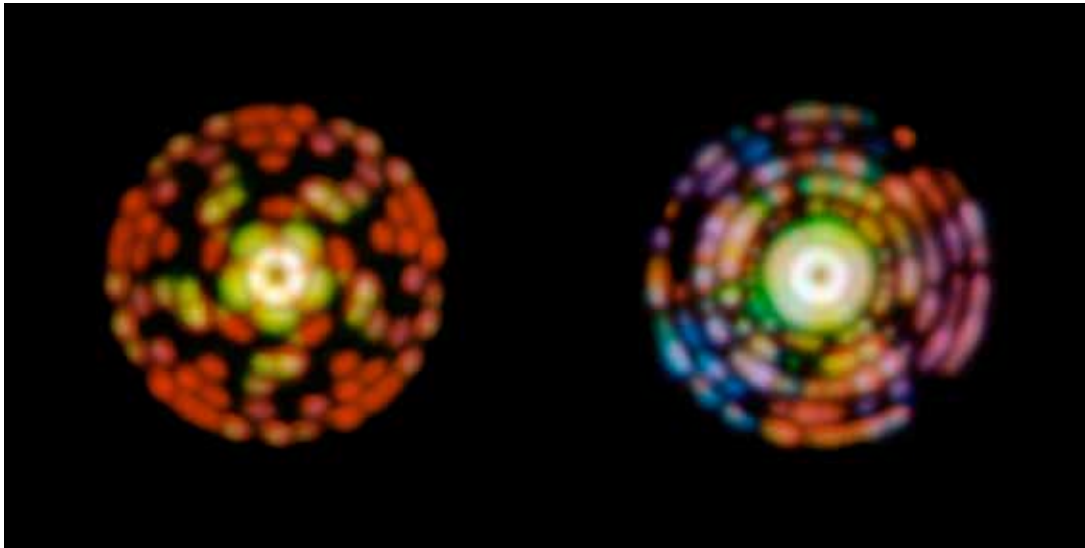
Lori Hepner
Status Symbols

statement

Status Symbols is a series of virtual portraits that are studies of identity in a digital age. 140 character updates on Twitter allow for virtual personas to be created that differs from physical looks. This ongoing series looks at mapping self-identity through the lensof social media updates from larger than life personalities, corporate entities, and ordinary individuals. The abstract portraits are created with spinning LEDs that translate the words into flashing bursts of light through custom created hardware and software. These ons and offs of binary code are at the base level of digital communication. Each portrait represents a fleeting moment of identity, at least until the next status update.

biography

Lori Hepner is a visual artist with an ongoing interest in exploring how digital technology and is impacting society and individuals. Recent work, Status Symbols, is a series of abstract, photo-based portraits that are studies of identity in the age of social media. She is an Associate Professor of Integrative Arts at the Greater Allegheny campus of Penn State University. Her primary studio in Pittsburgh, PA with temporary spaces filling in while on residencies in UK and Finland.

links

http://www.lorihepner.com/status-symbols-1
http://www.lorihepner.com/

Daniel Howe
Automatype

statement

Automatype is a a networked installation (built with analog TV monitors & Raspberry PI microcomputers) which can be seen as either ambient text art, a weird game of solitaire for the computer, or an absorbing ongoing puzzle for a human viewer, is an apt demonstration of some of the powers of "RiTa," as it uses algorithms to find the bridges between English words, Six-Degrees-of-Kevin-Bacon-style — not bridges of garbled nonsense but composed of normative English. You will spend either 10 seconds or 5 minutes staring at this thing; you will also see either a bunch of random words, or occasionally, if not always, engaging samples of minimalist poetry. Depending on your perspective, the installation presents either a bunch of random words, or occasionally, if not always, engaging samples of minimalist poetry...
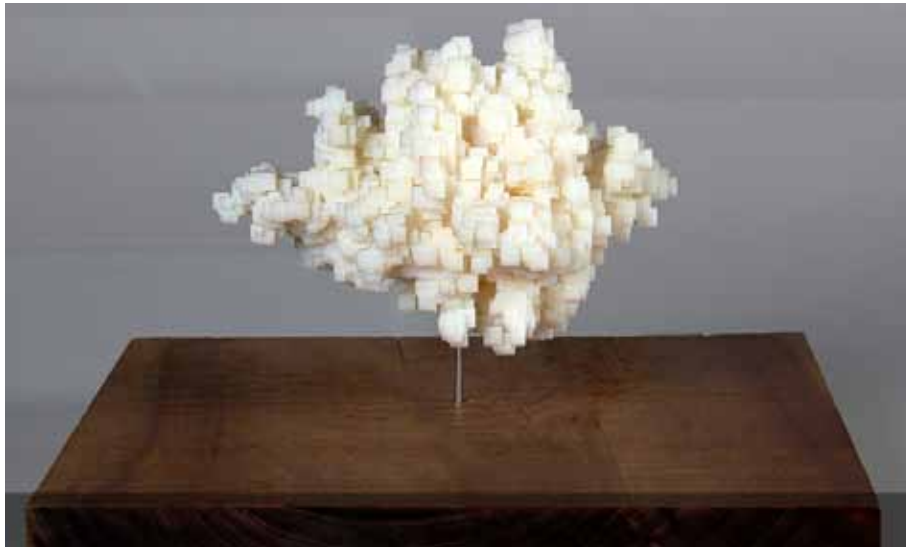
biography

Daniel C. Howe is an artist, researcher and critical technologist whose work focuses on the implications of networked and computational technologies, specifically concerning code, language and networks.

links

https://rednoise.org/~dhowe/automatype/
https://rednoise.org/daniel/

Scott Kildall
Data Crystals

statement

I see data as sculptural material, like clay, plaster or steel. By using code to transform columns of numbers into 3D models, I call myself a "data miner." *Data Crystals* are a series of 3D-printed sculptures, which I generate algorithmically from open data sources. My source for the data crystals are open datasets, which is data that is freely available for the public to use. Other cities all over the country are embarking on similar open data projects. Over the next several years, data from the Open Data Portal will evolve into realtime datastreams with interfaces for public access.

biography

Scott Kildall is cross-disciplinary artist who writes algorithms that transform various datasets into 3D sculptures and installations. The resulting artworks often invite public participation through direct interaction. He has received fellowships, awards and residencies from organizations including Impakt Works, Autodesk, Recology San Francisco, Turbulence.org, Eyebeam Art + Technology Center, Kala Art Institute and The Banff Centre for the Arts. He currently resides in San Francisco where he runs his studio and works as a New Media Exhibit developer at The Exploratorium.

links

http://kildall.com/project/data-crystals/
http://kildall.com/
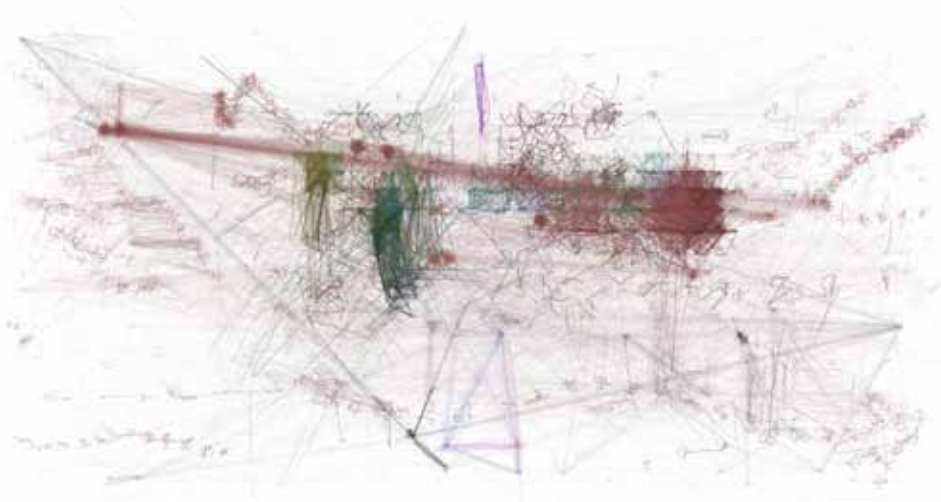
Benjamin Grosser
Computers Watching Movies
computationally-produced HD video with audio

statement

This artwork shows what a computational system sees when it watches the same films that we do. The work illustrates this vision as a series of temporal sketches, where the sketching process is presented in synchronized time with the audio from the original clip. was computationally produced using software written by the artist. This software uses computer vision algorithms and artificial intelligence routines to give the system some degree of agency, allowing it to decide what it watches and what it does not.
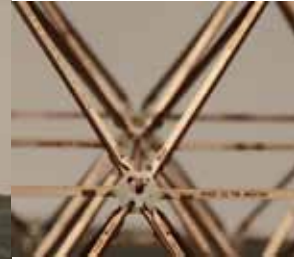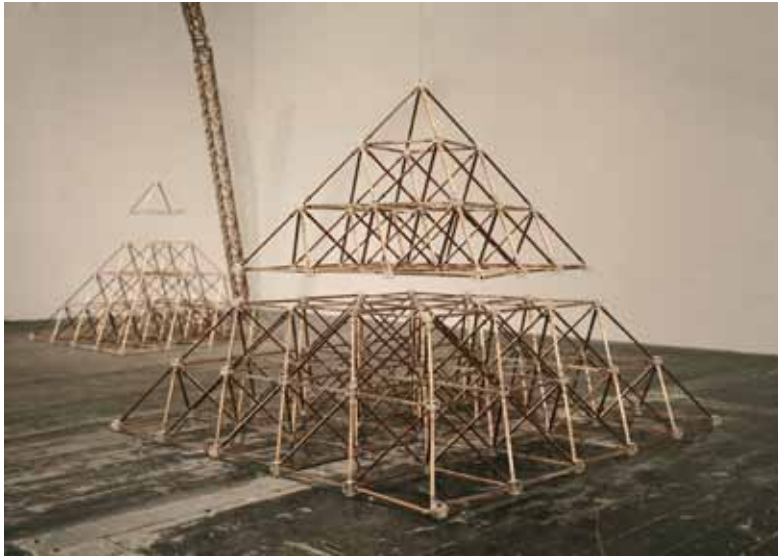
biography

School of Art + Design, and National Center for Supercomputing Applications
University of Illinois at Urbana-Champaign   http://bengrosser.com

links

https://vimeo.com/78711521
http://bengrosser.com/projects/computers-watching-movies/

Meg Mitchell
space is language is space

statement
This piece combines text gleaned from a google search with a modular space frame. The google search was run to complete the sentences "Space is…" and "Language is…" The nature of the google search creates an allegedly non-discriminatory body of data that is at times humorous, profound, self-referential and self-contradictory.
A processing script was used to distribute the text into approximately 5,000 unique laser cut components with a custom typeface of SVG objects for single line laser cut letters.

biography
Mitchell discovered her penchant for artistic expression as a child through theater and dance, then as an adult through photography and sculpture. She received a BFA in Sculpture from the University of South Florida in 2005 and an MFA in New Genres from the University of Maryland College Park in 2008. Her work has been featured in numerous publications, such as Art Papers, Art in America and the Washington Post. In 2012, she was awarded an Expanded Artist's Book grant from Columbia College Chicago for her upcoming project in collaboration with Denise Bookwalter, "Rain/fall," a data driven artist's book and mobile application.

links
http://www.megmitchell.com/?page_id=28
http://www.megmitchell.com/

Joelle + Owen Dietrick + Mundy
Packet Switching

statement
Joelle Dietrick and Owen Mundy's ongoing body of work titled *Packet Switching* focuses on the relation among information exchange, architecture, and social issues. They examine and appropriate the action of data transfer across networks to show the major implications that these three cultural elements have at large. Packet switching, in technical terms is designed to be practical, to transfer information over a network, broken into small pieces at point A then to be sent to point B, where it is put back together.

biography
Owen Mundy is an artist, designer, and programmer who investigates public space and its relationship to data. His artwork highlights inconspicuous trends and ofers tools to make hackers out of everyday users. He is the recipient of fellowships from the states of Indiana and Florida, a San Diego Fellowship, and a DAAD Fellowship.
*Joelle Dietrick's paintings, drawings, and animations explore contemporary nesting instincts and their manipulation by global economic systems. She has received fellowships from the University of California, Florida State University and the Deutscher Akademischer Austausch Dienst (DAAD).*

links
http://owenmundy.com/docs/PacketSwitching2014_low.pdf
http://owenmundy.com/
http://joelledietrick.com/
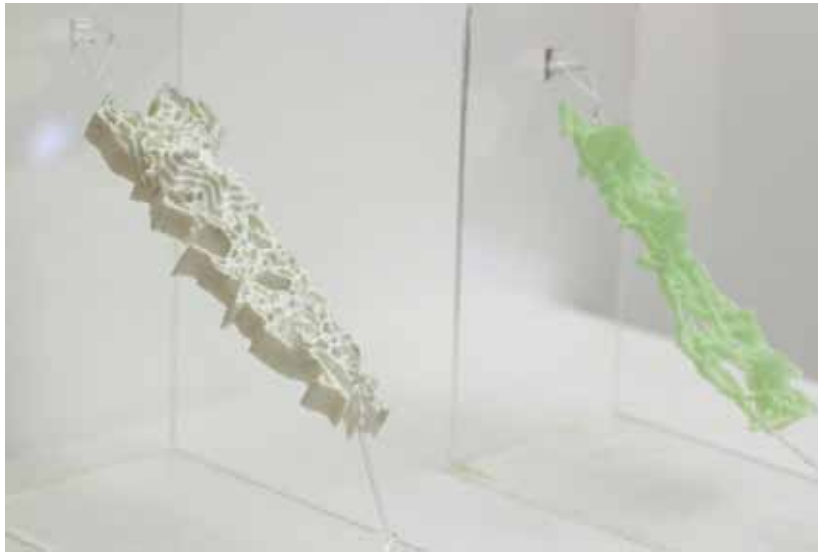
Mark Ramos
last_night_i_dreamt_of_a_hollow_earth

statement

last_night_i_dreamt_of_a_hollow_earth is a series of 3-d printed sculptures generated from the brainwave patterns of dreams. This project began as a means to manifest intangible things as physical objects. I was interested in taking abstract concepts like dreams, thoughts, and memories and making them into physical sculptures. A BCI (Brain Computer Interface) was used to record the electrical activity of people's brainwaves while they talked about their dreams. These brain readings were used to generate virtual shapes. These virtual shapes were then converted into 3-D mesh objects that were 3-D printed as physical sculptures. These sculptures can be seen as artifacts of the unconscious.

biography

Mark Ramos is a Brooklyn-based new media artist. He works with the mediums of physical computing (using computers to sense and react to the physical world), software programming and digital sculpture to create interactive, installation pieces. His work is often concerned with using digital technology as an intermediary to explore the intangible.
You can also find him playing drums for various bands in Brooklyn.

links

http://www.markhramos.org/template/hollowearth.html
http://www.markhramos.org/

Martin Reiche
Drone Garden

statement

Drone Garden addresses the issue of naturality in a networked and through that means virtualized environment. As a series of interconnected hybrid "plants", the installation creates a utopian garden through wires, circuit boards, cables and other circuitry - a garden in which all of their inhabitants, the plants (drones), are constantly fighting for resources (network bandwidth). This fight, happening on packet level on the network sockets and in the memory of the "plants", is fueled by an instinctive codified behavior which is visualized on the screen. The installation raises the question if it is ethical to interfere with such a confined microcosm, which, even though carefully designed and therefore artificial, nevertheless behaves and fights for its existence.

biography

Martin Reiche is a media artist living and working in Berlin, Germany, and is regularly presenting on professional computer science and digital art and gaming conferences. His artistic work has been shown at numerous festivals and museums around the world.

links

http://cargocollective.com/martinreiche/Drone-Garden
http://www.martinreiche.com/
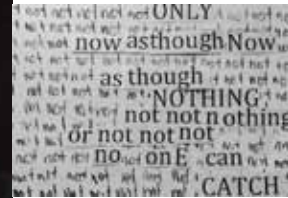
Catherine Siller
Not Not 0.1

statement

Performance using technology to reinsert the body into the digital, to push past the screen, and to forge live, candid connections. Every day we perform ourselves in digital space. In *Not Not 0.1*, I use my own custom software and a motion capture camera to generate projected graphics, text, and images of myself. I immerse myself in these projections. In a duet with my digital double, I dance between the virtual and the real. I challenge the boundary between the digital and the physical, and the stability of gesture and language. Eventually my double takes on a life of her own. I leave the stage and she continues. *Not Not 0.1* was listed as one of the "Top 10 coolest moments from the Arts and Tech Symposium" at CT College.

biography

Catherine Siller is an artist and performer whose work investigates the relationship between digital culture, the body, and identity. She has exhibited and performed her work throughout the United States and abroad. Her work has also been published in Infinity's Kitchen (Issue 7, online). Siller holds an MFA in Digital + Media from the Rhode Island School of Design and a BA in Visual and Environmental Studies from Harvard University. She was the Mellon Fellow for Digital Media/Performance at Marlboro College in Marlboro, VT. She currently lives and works in Boston, MA.

links

http://catherinesiller.com/work/not-not-0-1
http://catherinesiller.com/

Robert Spahr
Blue Colic Cruft

statement

Blue Colic Cruft recombines footage from surveillance cameras into other media to explore the relationship between war, surveillance, and automation within a machine aesthetic. The camera points at a pastoral scene consisting of a row of trees next to a country road, and in the distance is a small body of water. The simplicity and beauty of this image is contrasted with the knowledge that someone is watching. I call this work '*Cruft*', which is a computer hacker term defined as an unpleasant substance; excess; superfluous junk; and redundant or superseded computer code. The Cruft computer program downloads an image from the camera, as well as a shorts of news from the NPR or CNN. They are copied and manipulated by the algorithm, creating a short video that mashes together two different kinds of streaming data in what becomes a violent stuttering cough.

biography

I make visual art from the digital leftovers produced by the main stream media as well as the digital leftovers we create as individuals left behind on social networking sites, and scattered across the web. I write automated computer programs that collect these digital leftovers by scraping them from the web, and remixing them into a digital collage. I am currently an Associate Professor in the Cinema and Photography Department at Southern Illinois University Carbondale.

links

http://cargocollective.com/martinreiche/Drone-Garden
http://www.martinreiche.com/

{ "dcDate": "2014-11-20T14:30:00-05:00",
"hearingPage":
"http://www.intelligence.senate.gov/hearings…
hearing-nomination-nicholas-j-rasmussen-be-
director-national-counterterrorism-center",
"title": "Open Hearing: Nomination of
Nicholas J. Rasmussen to be the Director of
the National Counterterrorism Center",
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"http://www.intelligence.senate.gov/sites/de…
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"localName": "141120_rasmussen.pdf" }, {
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"localName": "141120_questionnaire(6).pdf" },
{ "remoteUrl":
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"firstName": "Nicholas J.", "lastName":
"Rasmussen" }] }

Abram Stern (aphid)
The Unreliable Interrogator: smallest procedural utterance

statement

The work of intelligence is increasingly performed by software. These tasks operate upon an ever-growing corpus of A/V media, text, and data produced by the electronic traces of daily life. These archives theorize media as the first step in a series of algorithmic interrogations with each new layer of metadata providing a new layer of abstraction on which to operate.   Simultaneously embracing operational methods and amplifying their limits, the *Unreliable Interrogator* procedurally analyzes public documents and media gathered from the Senate Intelligence Committee, the main oversight body of the US Intelligence Community. Oversight denotes "the act of overseeing"; a view from above, surveillant supervision. But it also means "to disregard", a failure to notice. Seeing and not seeing. In the cinematic language of a hearing, camera changes correspond to speaker changes. These markers provide an opportunity to temporally map the discourse of a hearing, long shots connoting testimony, short bursts Q&A. The images in this piece display the formal 'difference' between frames of video and are produced by the browser.

biography

Abram Stern is a new media artist, archivist and scholar who is interested in web archaeology, panoptics and the public domain. His work involves the mapping and animation of large corpora of government and citizen-produced video.

links

https://unreliable.interrogator.us/s-p-u
https://github.com/aphid/smallest-procedural-utterance

Andrei Thomaz,
Time Machines

statement

Based on research on manmade time-measuring devices, the *Time Machines* project aims to create software that produce images composed by time. That is, visual results that condense a length of time into one single image, in a way similar to long-exposure photography and time-lapse videos. Webcam images are processed by the softwares, their pixels are removed and recombined in order to obtain images with pixels extracted at different moments. The way the pixels are manipulated is based on the study of a time-measuring device in particular, after which the software was named. *Time Machines* was awarded the Funarte Visual Art Production Stimulus Grant.

biography

Andrei Thomaz is a visual artist and teacher. He holds a Master in Visual Arts by the ECA / USP and graduated in Fine Arts from the UFRGS. His artistic production covers various media, digital and analog, involving collaborations with artists and sound and interactive installations and performances. He is an interactive developer, working with advertising agencies and IT companies to develop works for clients. He lives and works in São Paulo, SP.

links

http://www.maquinasdotempo.art.br/index_en.html
http://andreithomaz.com/
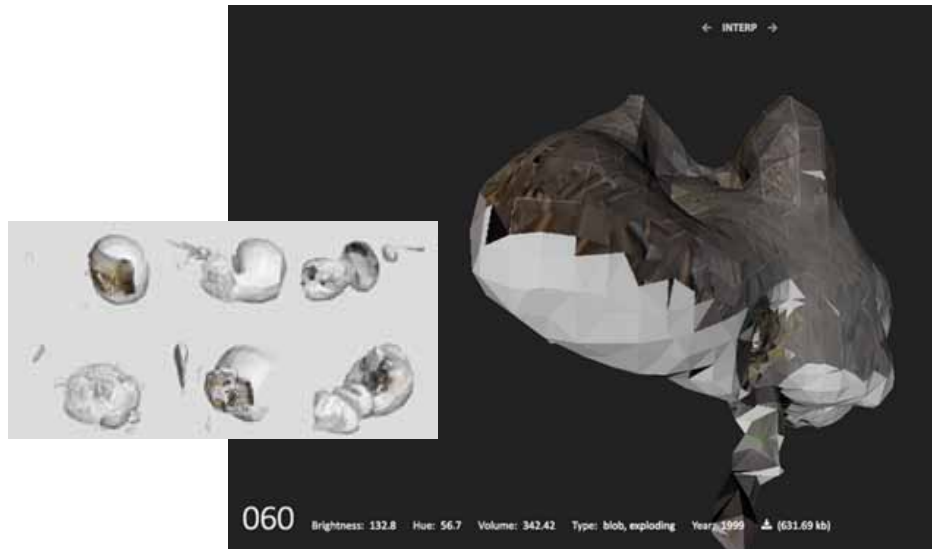
Jeff Thompson
INTERP

statement

INTERP is a series of digital sculptures generated by blending 100 unrelated photographs, placing them into simulated three-dimensional space, and importing them into photogrammetry software, tricking it into thinking the photographs are of a single object. Every photograph in my library were used as the input data set. In much of my work, I am interested in "useless" and culturally-derived data sets, so rather than use an arbitrary archive of photographs it seemed more natural to use a finite set that I had generated. INTERP is a commission for Turbulence.org.

biography

Jeff Thompson is an artist, programmer, hacker, and educator based in the NYC area. He received his BFA from the Minneapolis College of Art and Design and his MFA from Rutgers University, and is currently Assistant Professor and Program Director of Visual Art & Technology at the Stevens Institute of Technology in Hoboken, New Jersey.

links

http://archive.turbulence.org/Works/INTERP/
http://archive.turbulence.org/Works/INTERP/about.php
http://www.jeffreythompson.org/

Jody Zellen
The Unemployed

statement

"*The Unemployed*" is an interactive installation that visualizes world wide unemployment. Using data culled from online sources that list unemployment rates by country, "*The Unemployed*" represents the jobless as animated figures who inhabit a generic cityscape. The number of monthly unemployed varies from country to country ranging from a few thousand in sparsely populated places to many millions in places like the United States, India, and China. The software cycles through approximately 200 countries, drawing the number of unemployed as aimless wanderers. As a viewer enters the installation, their silhouette is captured by a video camera and the figures inhabit that shape and move with it for the duration that they are in the camera's scope of view.

biography

Jody Zellen is a Los Angeles based artist and writer who works in media including interactive installations, mobile apps, net art, animations, drawings, paintings, photographs, public art, and artists' books. Most recently she has been making mobile apps. She received a BA from Wesleyan University, a MFA from CalArts and a MPS from NYU's Interactive Telecommunications Program.

links

http://www.jodyzellen.com/cerritos/index.html
http://www.jodyzellen.com/unemployment_project/unemployed.html
https://itunes.apple.com/sg/app/urban-rhythms/id466124689?mt=8
http://www.jodyzellen.com/

Project Curators

Tiffany Funk, PhD (ABD) Department of Art History
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Conrad Gleber, Professor and Director
Digital Arts & Media Design Program
La Salle University, Philadelphia

Chris Manzione, Assistant Professor
Visual Arts and Technology
Stevens Institute of Technology

Ivan Martinez, Independent Artist

Mat Rappaport, Associate Professor
Columbia College Chicago

Gail Rubini, Professor Emeritus
Department of Art, Florida State University
Digital Arts & Media Design, La Salle University

Introduction
Mat Rappaport, Associate Professor
Columbia College Chicago

Essays
Tiffany Funk, PhD (ABD) Department of Art History
Dissertation on early computing and performance art, University of Illinois at Chicago

Meredith Hoy, Assistant Professor
Arizona State University

For more information about the artists and their projects, please go to:

v1b3.com